

FALL OF TWO FLOORS IN A MANCHESTER WAREHOUSE.—On Monday in last week, an accident, fortunately not attended with very serious results, occurred in the warehouse of Messrs. Ormrod and Hardcastle, cotton spinners and manufacturers, at the corner of Pall-mall and Newmarket-lane. The warehouse in question is a building of five stories, including cellar. Workmen of Mr. T. Dale, joiner and builder, had been raising the floors. Five new beams of Dantia pine, each 24 feet long, and 15 inches by 9 inches in thickness, were placed under the flooring of the top room, which is about 80 feet long. All the goods in the warehouse, consisting of calicoes, were piled in that room, during Saturday and Monday morning, so as to leave the other rooms free for the workmen. During the Monday, a number of joiners were working in the highest story but one, putting in new beams for the intended new flooring of that room. Three window-frames had been taken out, for the purpose of the arches of the windows being raised. While these and other men were at work in the different floors, a sudden and very loud crash was heard, the new beam under the end of the top room next to Newmarket-lane snapped in two, and simultaneously the flooring resting upon the beam gave way, and it and the pieces of goods piled upon it fell into the next room below. The flooring at the same end of the latter room gave way beneath the shock and the weight of the rubbish and goods falling upon it, and all fell into the next room below, where their further downward progress was stayed. One end of the broken beam, which rested in the brickwork between two of the windows in process of alteration, on the breaking of the beam, forced out part of the wall. A large number of bricks fell. Strange to say, scarcely any of the workmen or porters were injured. A heavy stone from the string-course fell into the carriage-way, and made a deep indentation in the pavement. A few bricks fell into the street, but did no mischief, owing probably to their falling within a board enclosing the footpath before the warehouse. The accident seems to have resulted from the weight of goods placed in the top room having been too great for the beam to bear. It was intended, it is said, to put a pillar under the centre of each beam. The workmen had previously cautioned the porters against overloading the floor of the fifth story; and, after the accident, are stated to have declined to continue their work till that floor had been lightened.

THE METROPOLITAN MOVEMENT FOR ABOLITION OF THE LIGHT TAX not only continues, but has grown into "monster meetings." One of this sort was held in St. Pancras on the 27th ult. Large deputations were present from all the other metropolitan parishes. The Vestry-hall, at King's-road, Camden-town, in which the meeting was held, and which is calculated to hold at least 2,000 persons, was densely crowded. The chairman, Mr. Churchwarden Fraser, stated that the reason why St. Pancras, second to none in the metropolis, had not previously convened a public meeting was, that it was felt advisable to wait until the verge of the opening of Parliament, when the subject was being agitated all over the kingdom. As a medical man, he was opposed to the continuance of the tax, upon social and sanitary grounds. Darkness and dirt, ignorance, sickness, and crime certainly went hand in hand, and nothing so contributed to this and to the physical depression of the poorer portion of the people as the window-tax. If he wished to show the oppressive character of the window duties, he need only refer to the report of the Metropolitan Association for Improving the Dwellings of the Industrious classes, in which it is stated that "Sets of rooms in the inns of court, or the Albany, in Piccadilly, having as many windows, and being parts of larger houses, would pay only to the extent of 14d. per week out of a rental of from 80s. to 100s. per annum, while the tenants of the Metropolitan buildings pay 7½d. per week out of a rental of from 13s. to 16s. per annum." After entering his protest against any attempt to introduce a house-tax in lieu of a window-tax, it was resolved by

acclamation, "That light and air being necessary to existence, and the free gift of God to man, it is the opinion of this meeting that to tax these essentials is in opposition to every principle of morality; that, in the language of our forefathers, it is a badge of slavery, and a reproach to a people boasting of their freedom. That this meeting, therefore, calls upon the Commons House of Parliament to abolish for ever, without any substitute or modification, the impious, odious, and tyrannical tax on windows, and that a petition be presented to Parliament to this effect."—A meeting of the inhabitants of the united parishes of St. Andrew-above-Bar, and St. George-the-Martyr, was also held on the same evening, in the hall of the workhouse, Gray's-inn-lane, for the same purpose, and with the like results. On the Wednesday previous a meeting of the parishes of St. Giles-in-the-Fields and St. George, Bloomsbury, passed similar resolutions.

ACTINISM.—A fair correspondent, in the fairest of handwriting (which, having been sent to a profound professor of calligraphy, at the expense of thirteen postage stamps, is pronounced to show all that is nice), writes thus:—"In the *Household Words*, with reference to the building for the Exhibition, I find the word 'actinism.' Dictionaries have been vainly searched for a definition, and wiser heads than mine confess themselves puzzled. Will you be so kind as to enlighten us?" The word is of too recent coinage to be found in the dictionaries. The solar ray consists of three distinct though associated principles, namely, light, heat, and another agent, which has been recently named the actinic principle. It is this agent that is supposed to operate more especially in the promotion of vegetative processes, which the light itself, in certain stages, retards and injures, while the actinic ray promotes them. Previous to the demonstration and denomination of actinism, it was called the chemical ray, and was supposed to have some peculiar relation to electricity. Indeed, it has been stated, in *THE BUILDER*, that the actinic principle would perhaps be ultimately found to be *essentially* to the electric. In this idea we have since been supported by experiments of some chemists, showing that the positive electric force had manifested phenomena analogous to cold, while the negative had equally exhibited effects such as those of heat, that is, in peculiar circumstances, in which each was likely to manifest its own peculiar mode of operation, without mixture with its opposite. Now the solar rays are altogether radiant, as heat is, and although, doubtless, the luminous and actinic principles are not mere heat any more than heat is light or actinism, still they are so closely analogous; that some men of science have insisted that the three principles are merely different phenomena of one agent. We hope our correspondent has now some idea of "Actinism."

SAFETY-VALVES.—With reference to the continual recurrence of steam-boiler explosions, Dr. Murray, of Hull, suggests that the action of safety-valves might be improved if the waste or surplus steam, previous to its issue, were made to pass through a pipe traversing the hot-water in the boilers. The sudden emission of steam at a high temperature, he thinks, may have something to do with the explosion of boilers, and the gagging of the valve be dependant on the same cause. The necessity, of two safety-valves to every steam-boiler is advocated.

CO-OPERATIVE LABOUR EXPERIMENTS.—As incidents peculiar to the age in which we live, we cannot but regard with interest the attempts made from below to find a more satisfactory solution of the labour question. It is a new and impressive thing to find the artisan mind of the country deeply involved in the abstract logic, as well as in the practical logic, of such a question. Certain we are, that this great question is as yet unsolved: and we are hopeful enough to believe that some contribution towards its better understanding may be drawn from the cogitations and the experience of the workers themselves. From the report of a meeting of operatives in Manchester we learn some curious facts in illustration of the progress of

a doctrine often stated in our columns—to the effect, that the next great social experiment will be one of association. Three hundred men on the strike have taken a mill. We believe these few words will startle some ears like a report of barricades. Such a circumstance may or may not help to revolutionise industry; but it speaks of sobriety, union, character, and forecasting habits in the men. A factory is a costly affair. A vast change must have come over the factory population ere a man possessing mill-property could dream of letting it out to strikers. Much as we have seen and heard of the progress of Manchester during the last dozen years, we remember no fact so powerfully significant of advance as this attempt—however more or less wise or hopeful—at co-operative labour.—*Athenæum*.

A "LOST FRIENDS DEPARTMENT" AT THE GREAT EXHIBITION.—Considering the great number of persons from the provinces, totally unacquainted with London, that will visit the Great Exhibition; considering that a great proportion will be accompanied by relatives or intimate friends; considering that many of these will be young persons not quite capable of taking care of themselves; considering the frequent liability of parties to get parted in the throng of sightseers by momentary lingerings at attractive objects; considering that the pleasures of the day would, in most such cases, be disagreeably interfered with; considering the advantage found to accrue from the "Lost Luggage Department" of railways;—would not a "Lost Friends Department" be a desideratum at the Great Exhibition, e.g. a conveniently situated space, slightly elevated and railed off, so as to prevent the "lost ones" in a well-defined row or two, "until called for?"—*W. S. M.*

THE IRON TRADE.—In the Newcastle district a rise of 5s. in bar and bolt-iron has, it is said, been formally resolved on, at a meeting of the district masters. The great rulers of the English trade, as they hold themselves to be, resolved just the other day that no rise should at present be attempted. What will those who regard all but the highest priced masters as "small and needy" say to this? The Newcastle masters must be very great men indeed, and the ruling powers of past times small by comparison, and needy too!—A very influential meeting of the Scotch iron trade was held at Glasgow recently, in order to consider how the prejudice in England against Scotch iron could be removed. A committee was appointed to report. Thus the recent efforts in the English trade to put down the Scotch appear to be only stirring Sawney's iron "dander" up into a reactionary glow of ire, and we may anticipate a new invasion by the Scots, with iron bars in place of broad swords, and on pigs in place of horses.—The Welsh are also still heating their furnaces for hot work of some sort or other. The Dolais Iron Works are getting on, according to the *Swansea Herald*, "in a most spirited manner, and are making, on an average, from 1,300 to 1,400 tons of marketable bar-iron per week."

OUR NATIONAL GALLERY.—In a city containing nearly 400,000 houses, the Government of this country can find four rooms only which they can devote exclusively to the keeping and exhibition of the nation's gallery of pictures. The small city of Dresden has long found room for the fair exhibition of 2,000 pictures, and yet is preparing a new gallery expressly designed for the purpose: and the people of another small German city, Munich, have actually four great galleries within a few hundred yards of their doors,—the Pinacothek, the Glyptothek, the new gallery for modern pictures, and the gallery of the Hofgarten; not to mention the great gallery of Schleissheim, a few miles from the capital, besides the Palace, and twenty other art-exhibitions in churches, and other buildings, always open to the public.—*R. Wornum, in Art-Journal*.

PORTLAND BREAKWATER.—The daily papers state that its present length is about 1,040 feet—12 feet above high-water-mark. It stands the present gale well, and two points of the compass are already sheltered in Portland-roads with smooth water.